

allegedly indefinite. Applicants respectfully disagree with this rejection. Without conceding the propriety of any part of this rejection, however, Applicants have amended Claims 1, 21, 30, 37, 53 and 61 to improve their form, especially with respect to the recitation of the plurality of inks. It is submitted that there is sufficient antecedent basis for terms used in the claims and that the claims are complete. For example, Claim 14 recites multiple steps. Applicants submit that no new matter has been added by the amendments herein.

Claims 1, 4-14, 17-22, 25-30 and 33-36 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification. Applicants submit that the feature relating to different component ratios of a surface active component is supported at least by original Claims 3, 16, 24 and 32, which have been cancelled.

It is submitted that the claims comply with all aspects of Section 112, and withdrawal of these rejections is respectfully requested.

Claims 1, 4-14, 17-22, 25-30 and 33-35 were rejected under 35 U.S.C. § 103 as allegedly obvious over Matsumoto, et al. (U.S. Patent No. 4,860,026) in view of Suzuki (U.S. Patent No. 4,551,736) and Sugimoto, et al. (U.S. Patent No. 5,477,248). Claim 36 was rejected under 35 U.S.C. § 103(a) as allegedly obvious over Matsumoto, et al. in view

of Suzuki and Sugimoto, et al. Applicants respectfully disagree with these rejections.

Independent Claims 1, 14, 21, 30 and 36 recite that, regarding inks having different densities in the same color category, the penetrabilities of the thick (relatively high dye density) and the thin (relatively low dye density) inks are positively made different by differentiating the ratio of the surface active agent for thick and thin inks.

Matsumoto, et al. discloses the use of plural inks having different densities in the same color category.

Suzuki discloses a technique for making the penetrabilities of plural inks having different densities in the same color category substantially even.

Sugimoto, et al. discloses the structure for differentiating the penetrabilities in accordance with colors.

Of these three references, Sugimoto, et al. is directed to differentiating the penetrability. Sugimoto, et al., however, merely discloses the differentiation of penetrabilities in accordance with what the color is. (For example, black ink is to have a lower penetrability than yellow ink.) Meanwhile, Suzuki discloses a technique for making penetrabilities substantially the same, so as to make the dot diameters of thick and thin inks equal.

In contrast, in the present invention, the penetrabilities are positively differentiated in order to

improve the qualities of the image in accordance with the ink densities: thick ink is for recording a vivid image; thin ink is for providing a grainless image and satisfactory gradation characteristics.

Thus, Applicants submit that if the three cited references are taken in combination, the ink-jet recording apparatus and method would use plural inks having different densities in the same color category; differentiation of the penetrability of each of the inks would be based on what color the ink is.

Applicants therefore conclude that none of the references suggests the claimed arrangement for positively differentiating the penetrabilities of plural inks (thick and thin inks) having different densities in the same color category, and that this differentiation of the penetrabilities occurs due to use of the surface active agent.

Claim 36 was also rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter, namely, printed matter, and under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification. Applicants respectfully disagree with these rejections.

It is submitted that MPEP 706.03(a) and the cases cited therein do not support the Section 101 rejection, as Claim 36 is not directed to a mere arrangement of printed

matter. Claim 36 relates to a recorded article on which the image is formed by inks that are characterized in that ink having a high density has low penetrability, and ink having a low density has high penetrability. Applicants submit that the recorded article that results is different from that of a conventionally known printed article.

Claims 37-62 were rejected under 35 U.S.C. § 103 as allegedly obvious over Matsumoto, et al. in view of Suzuki, Sugimoto, et al. and Sekiya (JP 1-242256). Applicants respectfully disagree with this rejection. The Matsumoto, et al., Suzuki and Sugimoto, et al. references have been discussed above. Sekiya discloses a structure for containing plural inks in a partitioned container. Sekiya is not, however, directed to plural inks having different densities in the same color category. Applicants therefore conclude that Claims 37-62 are not rendered obvious by these four references, either singly or in combination.

The Examiner has made of record, but not relied upon, Sugitani, et al. (U.S. Patent No. 4,611,219), Suzuki (U.S. Patent No. 4,855,762) and Iwata, et al. (U.S. Patent No. 5,245,362). It is submitted that these references do not teach or suggest the claimed invention, either.

For the foregoing reasons, Applicants submit that the present invention is patentably defined by the independent claims. The dependent claims are also submitted to be patentable because they set forth additional aspects of

the present invention and are dependent from the independent claims. Separate and individual consideration of each dependent claim is respectfully requested.

Applicants respectfully request that the Section 112, 103 and 101 rejections be withdrawn. Applicants submit that this application is in condition for allowance and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our new address given below.

Respectfully submitted,

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